

- Analyze the geographic, political, economic, religious, and social structures of civilizations of Islam in the Middle Ages.
- Analyze the geographic, political, economic, religious, and social structures of the civilizations of China in the Middle Ages.
- Analyze the geographic, political, economic, religious, and social structures of the sub-Saharan civilizations of Ghana and Mali in Medieval Africa.
- Analyze the geographic, political, economic, religious, and social structures of the civilizations of Medieval Japan.
- Analyze the geographic, political, economic, religious, and social structures of the civilizations of Medieval Europe.
- Compare and contrast the geographic, political, economic, religious, and social structures of the Meso-American and Andean civilizations.
- Analyze the origins, accomplishments, and geographic diffusion of the Renaissance.
- Analyze the historical developments of the Reformation.
- Analyze the historical developments of the Scientific Revolution and its lasting effect on religious, political, and cultural institutions.
- Analyze political and economic change in the sixteenth, seventeenth, and eighteenth centuries (the Age of Exploration, the Enlightenment, and the Age of Reason).

## Mathematics

By the end of grade seven, students are adept at manipulating numbers and equations and understand the general principles at work. Students understand and use factoring of numerators and denominators and properties of exponents. They know the Pythagorean theorem and solve problems in which they compute the length of an unknown side. Students know how to compute the surface area and volume of basic three-dimensional objects and understand how area and volume change with a change in scale. Students make conversions between different units of measurement. They know and use different representations of fractional numbers (fractions, decimals, and percents) and are proficient at changing from one to another. They increase their facility with ratio and proportion,

compute percents of increase and decrease, and compute simple and compound interest. They graph linear functions and understand the idea of slope and its relation to ratio.

### NUMBER SENSE

Students:

- Know the properties of, and compute with, rational numbers expressed in a variety of forms.
- Use exponents, powers, and roots and use exponents in working with fractions.

### ALGEBRA AND FUNCTIONS

Students:

- Express quantitative relationships by using algebraic terminology, expressions, equations, inequalities, and graphs.
- Interpret and evaluate expressions involving integer powers and simple roots.
- Graph and interpret linear and some nonlinear functions.
- Solve simple linear equations and inequalities over the rational numbers.

### MEASUREMENT AND GEOMETRY

Students:

- Choose appropriate units of measure and use ratios to convert within and between measurement systems to solve problems.
- Compute the perimeter, area, and volume of common geometric objects and use the results to find measures of less common objects. They know how perimeter, area, and volume are affected by changes of scale.
- Know the Pythagorean theorem and deepen their understanding of plane and solid geometric shapes by constructing figures that meet given conditions and by identifying attributes of figures.

### STATISTICS, DATA ANALYSIS, AND PROBABILITY

- Students collect, organize, and represent data sets that have one or more variables and identify relationships among variables within a data set by hand and through the use of an electronic spreadsheet software program.

### MATHEMATICAL REASONING

Students:

- Make decisions about how to approach problems.
- Use strategies, skills, and concepts in finding solutions.
- Determine a solution is complete and move beyond a particular problem by generalizing to other situations.

## Science

### FOCUS ON LIFE SCIENCE

#### Cell Biology

- All living organisms are composed of cells that number from just one to many trillions and whose details usually are visible only through a microscope.

#### Genetics

- A typical cell of any organism contains genetic instructions that specify its traits. Those traits may be modified by environmental influences.

#### Evolution

- Biological evolution accounts for the diversity of species developed through gradual processes over many generations.

#### Earth and Life History (Earth Science)

- Evidence from rocks allows us to understand the evolution of life on Earth.

#### Structure and Function in Living Systems

- The anatomy and physiology of plants and animals illustrate the complementary nature of structure and function.

#### Physical Principles in Living Systems (Physical Science)

- Physical principles underlie biological structures and functions.

#### Investigation and Experimentation

- Scientific progress is made by asking meaningful questions and conducting careful investigations. To understand this concept and to address the content of the other three strands, students should develop their own questions and perform investigations.

# GRADE SEVEN

## *The California Content Standards for Grade Seven*

CALIFORNIA  
DEPARTMENT  
OF EDUCATION

2000

Dear Parent/Guardian,

Well-communicated standards provide you with the information you need to have a better understanding of what your child is to learn in a specific grade level and in a specific subject. Your knowledge of the standards will help you frame your questions for parent-teacher conferences and counselor conferences; select reading and writing materials for the home; and shape your visits to public libraries and other places of interest.

# GRADE SEVEN

## English–Language Arts

### READING

#### Word Analysis, Fluency, and Systematic Vocabulary Development

- Students use their knowledge of word origins and word relationships, as well as historical and literary context clues, to determine the meaning of specialized vocabulary and to understand the precise meaning of grade-level-appropriate words.

#### Reading Comprehension (Focus on Informational Materials)

- Students read and understand grade-level-appropriate material. They describe and connect the essential ideas, arguments, and perspectives of the text by using their knowledge of text structure, organization, and purpose. The selections in *Recommended Readings in Literature, Kindergarten Through Grade Eight* illustrate the quality and complexity of the materials to be read by students. In addition, by grade eight, students read one million words annually on their own, including a good representation of grade-level-appropriate narrative and expository text (e.g., classic and contemporary literature, magazines, newspapers, online information). In grade seven, students make substantial progress toward this goal.

### Literary Response and Analysis

- Students read and respond to historically or culturally significant works of literature that reflect and enhance their studies of history and social science. They clarify the ideas and connect them to other literary works. The selections in *Recommended Readings in Literature, Kindergarten Through Grade Eight* illustrate the quality and complexity of the materials to be read by students.

### WRITING

#### Writing Strategies

- Students write clear, coherent, and focused essays. The writing exhibits students’ awareness of the audience and purpose. Essays contain formal introductions, supporting evidence, and conclusions. Students progress through the stages of the writing process as needed.

#### Writing Applications (Genres and Their Characteristics)

- Students write narrative, expository, persuasive, and descriptive texts of at least 500 to 700 words in each genre. The writing demonstrates a command of standard American English and the research, organizational, and drafting strategies outlined in Writing Standard 1.0.

### WRITTEN AND ORAL ENGLISH LANGUAGE CONVENTIONS

- Students write and speak with a command of standard English conventions appropriate to the grade level.

### LISTENING AND SPEAKING

#### Listening and Speaking Strategies

- Students deliver focused, coherent presentations that convey ideas clearly and relate to the background and interests of the audience. Students evaluate the content of oral communication.

#### Speaking Applications (Genres and Their Characteristics)

- Students deliver well-organized formal presentations employing traditional rhetorical strategies (e.g., narration, exposition, persuasion, description). Student speaking demonstrates a command

of standard American English and the organizational and delivery strategies outlined in Listening and Speaking Standard 1.0.

## History–Social Science

The intellectual skills noted below are to be learned through, and applied to, content standards for grades six through eight. They are to be assessed *only in conjunction with* the content standards in grades six through eight.

In addition to the standards for grades six through eight, students demonstrate the following intellectual reasoning, reflection, and research skills:

### CHRONOLOGICAL AND SPATIAL THINKING

Students:

- Explain how major events are related to one another in time.
- Construct various time lines of key events, people, and periods of the historical era they are studying.
- Use a variety of maps and documents to identify physical and cultural features of neighborhoods, cities, states, and countries and to explain the historical migration of people, expansion and disintegration of empires, and the growth of economic systems.

### RESEARCH, EVIDENCE, AND POINT OF VIEW

Students:

- Frame questions that can be answered by historical study and research.
- Distinguish fact from opinion in historical narratives and stories.
- Distinguish relevant from irrelevant information, essential from incidental information, and verifiable from unverifiable information in historical narratives and stories.
- Assess the credibility of primary and secondary sources and draw sound conclusions from them.
- Detect the different historical points of view on historical events and determine the context in which the historical statements were made (the questions asked, sources used, author’s perspectives).

### HISTORICAL INTERPRETATION

Students:

- Explain the central issues and problems from the past, placing people and events in a matrix of time and place.
- Understand and distinguish cause, effect, sequence, and correlation in historical events, including the long- and short-term causal relations.
- Explain the sources of historical continuity and how the combination of ideas and events explains the emergence of new patterns.
- Recognize the role of chance, oversight, and error in history.
- Recognize that interpretations of history are subject to change as new information is uncovered.
- Interpret basic indicators of economic performance and conduct cost-benefit analyses of economic and political issues.

## World History and Geography: Medieval and Early Modern Times

Students in grade seven study the social, cultural, and technological changes that occurred in Europe, Africa, and Asia in the years A.D. 500–1789. After reviewing the ancient world and the ways in which archaeologists and historians uncover the past, students study the history and geography of great civilizations that were developing concurrently throughout the world during medieval and early modern times. They examine the growing economic interaction among civilizations as well as the exchange of ideas, beliefs, technologies, and commodities. They learn about the resulting growth of Enlightenment philosophy and the new examination of the concepts of reason and authority, the natural rights of human beings and the divine right of kings, experimentalism in science, and the dogma of belief. Finally, students assess the political forces let loose by the Enlightenment, particularly the rise of democratic ideas, and they learn about the continuing influence of those ideas in the world today.

Students:

- Analyze the causes and effects of the vast expansion and ultimate disintegration of the Roman Empire.